

### **REMARKS**

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

By this amendment claims 1-4 and 6-20 are pending, claims 1 and 6 having been amended, claim 5 having been canceled without prejudice or disclaimer, claim 20 having been added, and claims 10-19 having been withdrawn by the Examiner.

In the Office Action of October 20, 2004, the Examiner issued a restriction requirement; objected to the drawings as allegedly being of insufficient quality for publication; rejected claims 6-8 under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention; rejected claims 1-3, and 9 under 35 U.S.C. 102(a) as allegedly being anticipated by “Interactive Virtual Relighting of Real Scenes” by Loscos et al. (“Loscos”); rejected claim 4 under 35 U.S.C. 103(a) as allegedly being unpatentable over Loscos in view of “Photometric Image-Based Rendering for Virtual Lighting Image Synthesis” by Mukaigawa et al. (“Mukaigawa”); and rejected claims 5-8 under 35 U.S.C. 103(a) as allegedly being unpatentable over Loscos, in view of U.S. Patent No. 6,072,903 to Maki.

### **Form PTO-892**

Applicant previously submitted and the Examiner considered form PTO-1449 listing a summary of the paper, “Photometric Image-Based Rendering for Virtual Lighting Image Synthesis” by Mukaigawa et al. (“Mukaigawa summary”) and listing a second paper, “Interactive Virtual Relighting and Remodeling of Real Scenes” by Loscos (“Loscos 2”), published October 2000.

Applicant notes that in the present Office Action, the Examiner rejected claims based on the complete Mukaigawa paper (rejection of claim 4) and the Loscos paper (rejection of

claims 1-3, 8, and 9) which has a similar, but not identical title to Loscos 2, and was published in 1998. Applicant notes that, although the Examiner, not the Applicant, cited the complete Mukaigawa paper and Loscos, the Examiner did not provide form PTO-892 indicating, for the record, that these references were considered. Applicant respectfully requests that the Examiner provide form PTO-892 indicating that these references were considered so that the record may be accurate and complete.

#### **Restriction Requirement**

On page 2 of the Office Action, the Examiner issued a restriction requirement indicating that the claims are directed to two patentably distinct species. Applicant elects species A without traverse. Species A includes claims 1-9 and new claim 20.

#### **Objection to the Drawings**

On page 3 of the Office Action, the Examiner objected to the drawings as allegedly being of insufficient quality for publication. Applicant is filing, concurrently herewith, replacement drawings which are of sufficient quality for publication. Therefore, Applicant respectfully requests that the objection to the drawings be withdrawn.

#### **Rejection of claims 6-8**

On pages 3 and 4 of the Office Action, the Examiner rejected claims 6-8 under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner pointed out that the phrase "based upon the position information" in claim 6 allegedly renders the claim indefinite because of a reference to "surface position" in claim 1. Applicant amended claim 6 to clearly identify the position information to which the

claim refers. Therefore, Applicant submits that the claim is now definite and respectfully requests that the rejection of claims 6-8 be withdrawn.

**Rejection of Claims 1-3 and 9**

On page 4 of the Office Action, the Examiner rejected claims 1-3 and 9 under 35 U.S.C. 102(a) as allegedly being anticipated by Loscos. Applicants submit that amended claim 1 obviates the rejection.

Amended independent claim 1 is directed to a computer-implemented method of video conferencing for digitally illuminating an object in real-time. The method includes, among other things, dynamically moving a virtual light source based on position information obtained by tracking the movement of the object. Applicant submits that Loscos fails to disclose or suggest dynamically moving a virtual light source based on position information obtained by tracking the movement of the object, as required by amended independent claim 1.

Because Loscos does not disclose each and every feature of claim 1, Applicants submit that claim 1 is not anticipated by Loscos and respectfully requests that the rejection of claim 1 be withdrawn.

Claims 2, 3, and 9 depend from claim 1 and are not anticipated by Loscos for at least the reasons discussed with respect to claim 1. Therefore, Applicants respectfully request that the rejection of claims 2, 3, and 9 be withdrawn.

**Rejection of claim 4**

On page 5 of the Office Action, the Examiner rejected claim 4 under 35 U.S.C. 103(a) as allegedly being unpatentable over Loscos in view of Mukaigawa. Applicant submits that amended claim 1 obviates the rejection.

Claim 4 depends from claim 1, which recites, among other things, dynamically moving a virtual light source based on position information obtained by tracking the movement of the object. For the reasons provided with respect to claim 1, Loscos fails to disclose or suggest this feature. Mukaigawa also fails to satisfy the deficiencies of Loscos. Therefore, Loscos and Mukaigawa do not disclose or suggest, separately or in any combination, dynamically moving a virtual light source based on position information obtained by tracking the movement of the object, as required by claim 1, from which claim 4 depends. Applicant, therefore, respectfully requests that the rejection of claim 4 be withdrawn.

#### **Rejection of Claims 5-8**

On page 6 of the Office Action, the Examiner rejected claims 5-8 under 35 U.S.C. 103(a) as allegedly being unpatentable over Loscos, in view of Maki. Applicant submits that amended claim 1 obviates the rejection with respect to claims 6-8. Claim 5 was canceled without prejudice or disclaimer thereby making the rejection of claim 5 moot.

Claims 6-8 depend from claim 1, which recites, among other things, dynamically moving a virtual light source based on position information obtained by tracking the movement of the object. For at least the reasons discussed with respect to claim 1, Loscos does not disclose or suggest dynamically moving a virtual light source based on position information obtained by tracking the movement of the object, as required by claim 1, from which claims 6-8 depend. Maki fails to satisfy the deficiencies of Loscos. Therefore, Applicants submit that Loscos and Maki do not disclose or suggest, either separately or in any combination, dynamically moving a virtual light source based on position information obtained by tracking the movement of the object, as required by claims 6-8. Applicant, therefore, respectfully requests that the rejection of claims 6-8 be withdrawn.

**New Claim 20**


New claim 20 depends from claim 1 and is patentable over the cited references for at least the reasons provided with respect to claim 1.

**CONCLUSION**

Having addressed all rejections and objections, Applicant respectfully submits that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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